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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,634	05/14/2001	Masaaki Nishino	Q64483	7274

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SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

AMINI, JAVID A

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 09/24/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/853,634

Applicant(s)

NISHINO, MASAOKI

Examiner

Javid A Amini

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 1-6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

Applicant's arguments filed July 09, 2003 have been fully considered but they are not persuasive.

- The Examiner's objection to the drawing (Figs. 1 and 3) has been withdrawn.
- The rejections of 112 first and second paragraphs have been withdrawn.
- Response to remarks on page 7, lines 25-27: Applicant argues that none of the prior art teaches or suggests such a unique combination of features. Masukane discloses video processing apparatus which converts one of NTSC type and VGA type video signals to the other, or overlay the two types of video signals and outputs them as either an NTSC type overlaid video signal or a VGA type overlaid video signal. Therefore Masukane has nothing to do with mixing digital information data and screen data. Examiner's reply: Applicant fails to claim explicitly type of signal, but Masukane explicitly suggests a NTSC (TV display) and a VGA (computer display) type of signals. And they are considered as a displaying signal. Masukane in Fig. 7 illustrates a A/D (analog to digital converter) with a memory for storing digital information data. It is well known in the art that all color display data contain RGB signals. A unique combination of features is: There are two different inputted signals (first and second), which are converted to digital signals, and selecting either first or second signals (called third signal) stores in the first and second memory locations. Examiner's interpretation: The step is well known in the art, the one signal can be a Video signals and the second signal can be VGA signals and the combination of these

signals can be displayed as a overlaid or outside of the each other region. For example: A video can be displayed on a computer display and processor can generate text associated to video signal.

- The appropriate rejection of pervious office action still maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Masukane et al.

1. Claim 1.

“An information displaying system, comprising: an A/D converting means for converting analog RGB signals inputted from a first input terminal to first digital RGB signals; a selecting means for selecting either second digital RGB 5 signals inputted from a second input terminal or said first digital RGB signals based on the inputted order, and for outputting third digital RGB signals being selected digital RGB signals; a screen mixing means comprising: a first memory for storing said third digital RGB signals and a second memory for storing digital information data inputted from a third input terminal, said screen mixing means detecting sizes of said third digital RGB signals and said digital information data, calculating designated control information, mixing said digital information data with said third digital RGB signals, generating a synchronization signal based on said designated control information, reading said

Art Unit: 2672

third digital RGB signals from said first memory and said digital information data from said second memory based on said synchronization signal, and forming displaying data by mixing said third digital RGB signals read from said first memory and said digital information data read from said second memory, so that said digital information data are displayed at outsides of a displaying region of said third digital RGB signals; and a displaying means for displaying said displaying data”, Masukane et al. teaches in (col. 5, lines 5-27) the RGB switch plays the role of a selector circuit for selectively connecting the three inputs to an output thereof one at a time. The output of the RGB switch is connected to the inputs of an analog-to-digital converter (ADC), an NTSC encoder 128, and a Gen-lock circuit. Masukane illustrates in Fig. 2 the board has a signal converting and mixing function, i.e., it is capable of receiving NTSC, RGB and S-type video signals, as well as VGA video signals and outputting them as any one of NTSC, RGB, S-type and VGA video signals as needed. Masukane teaches in (col. 6, lines 22-45) Gen-lock logic block receives video synchronization information derived from the signal output from RGB switch by way of the Gen-lock circuit along line. The video synchronization information could pertain to RGB, NTSC or S-type video depending on the particular signal output from the RGB switch. Masukane teaches in (col. 5, line 65-67) Specifically, with the programmable frame memory it is possible to transform VGA type video signals into NTSC type video signals and vice versa. Masukane teaches in (col. 1, lines 39-43) The personal computer may then fetch the bit-mapped data later as needed and, thereafter, handle the data as a VGA image including displaying the data on VGA monitor. Masukane does not disclose expressly display digital information data at outsides of a displaying region of third digital RGB signals. It would have been obvious at the time the invention was made to one of ordinary skill

Art Unit: 2672

in the art to display digital information data at outsides (overlay) of a displaying region with respect to the overlay in Masukane since it has been held an image overlay and rescan board capable of receiving image signals of a variety of formats including NTSC image signals representative of a real image and VGA image signals representative of a computer generated graphics image. The overlay and rescan board includes a timing gate-array for addressing a frame memory and for sending and receiving data to and from the frame memory. It would have been faster operations by using hi-tech processors and also less operating cost.

2. Claim 2.

"An information displaying system in accordance with claim 1, wherein: said designated control information comprises a dot clock frequency, a horizontal synchronizing frequency, a vertical synchronizing frequency, a front porch, a back porch, and a pulse width, so that said displaying data are displayed on said displaying means", Masukane illustrates in Fig. 2, item 162 is clock oscillator (clock frequency).

3. Claim 3.

"An information displaying system in accordance with claim 1, wherein: said screen mixing means forms said displaying data comprising digital information data displayed on at least one region of at least one of upper, lower, right, and left end parts which are outside of said displaying region of said third digital RGB signals", Masukane teaches in (col. 16, lines 7-17) the information originally input on line and converted into digital form by the ADC results in a different type of digital representation than the information sent from the computer along line to bus Buffers and through the VGA controller to the VGA RAM. The information sent by the computer uses a look-up table, as discussed fully above, while the information output of ADC

Art Unit: 2672

instead includes relative weights of the red, green and blue colors in its digital format. That is why the DAC must be controlled, so that it can know which of the digital-to-analog conversion techniques it is to perform.

4. Claim 4.

“An information displaying system in accordance with claim 1, wherein: said screen mixing means outputs said displaying data by applying scaling to said displaying data so that said displaying data correspond to the resolution of said displaying means”, Masukane teaches in (col. 5, lines 30-33) the ADC has a reference generator, not shown, for setting a full scale range and converts an analog RGB signal appearing on the input into corresponding digital data, the digital data being fed out via an output.

5. Claim 5.

“An information displaying system in accordance with claim 1, wherein: said screen mixing means outputs said displaying data by converting said displaying data to analog RGB signals”, Masukane teaches in (col. 5, lines 30-33) the ADC has a reference generator, not shown, for setting a full scale range and converts an analog RGB signal appearing on the input into corresponding digital data, the digital data being fed out via an output.

6. Claim 6.

“An information displaying system in accordance with claim 1, further comprising: a D/A converting means for converting said displaying data to analog RGB signals”, the step is obvious see Fig. 2 item 191.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

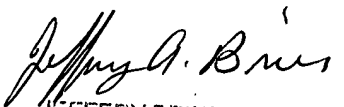
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-8705 for regular communications and 703-746-8705 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid A Amini
Examiner
Art Unit 2672

Javid Amini
September 15, 2003


JEFFERY BRIES
PRIMARY EXAMINER



AF / 2672
#6
Bull
RESPONSE UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE
GROUP 2672
PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q64483

Masaaki NISHINO

Appln. No.: 09/853,634

Group Art Unit: 2672

Confirmation No.: 7274

Examiner: Javid A. Amini

Filed: March 14, 2001

RECEIVED

For: INFORMATION DISPLAYING SYSTEM

DEC 23 2003

RESPONSE UNDER 37 C.F.R. § 1.116

Technology Center 2600

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated September 24, 2003, please consider the remarks

as submitted herewith on the accompanying pages:

As further explained in Applicant's previous amendment, Masukane discloses a video processing apparatus which overlays two types of video signals (NTSC and VGA) and displays them (as either an NTSC type overlaid video signal, or a VGA type overlaid video signal) in the same, single region.

The Examiner alleges that it is known in the prior art that video signals and VGA signals can be combined and that "the combination of these signals can be displayed as a[n] overlaid (sic) or outside of each other region" (Office Action. page 2 and 3). However, this allegation is unsupported.

In fact, Masukane does not display one of its two types of video signals "at outsides of a displaying region" of the other signals. Instead, Masukane overlays the two signals and displays them as a single overlaid signal in the same, single display region. The Examiner's reference to Masukane's Fig. 7 does not in any way support the Examiner's position. Masukane's Fig. 7 illustrates nothing more than conventional means (including analog-to-digital converter 98) for developing bit-map data from an NTSC video signal so that this data may be handled as a VGA image. Nowhere does Masukane disclose, teach or suggest that developing such bit data somehow results in displaying digital information outside of a displaying region of digital RGB signals.

Thus, Masukane does not disclose, teach or suggest reading digital RGB signals from a first memory and digital information data from a second memory based on a synchronization signal, and forming displaying data by mixing digital RGB signals read from the first memory

REMARKS

Claims 1-6 are all the claims pending in the application.

The Examiner rejects claims 1-6 under 35 U.S.C. §103(a) as being allegedly unpatentable over Masukane et al. (Masukane). Applicant respectfully traverses this rejection as follows.

As explained in Applicant's previous Amendment filed June 9, 2003, Applicant's claimed invention defines an information displaying system comprising a unique combination of features including, *inter alia*, a screen mixing means comprising:

- a first memory for storing said third digital RGB signals, and
- a second memory for storing digital information data inputted from a third input terminal,
- said screen mixing means
- detecting sizes of said third digital RGB signals and said digital information data,
- calculating designated control information,
- mixing said digital information data with said third digital RGB signals,
- generating a synchronization signal based on said designated control information,
- reading said third digital RGB signals from said first memory and said digital information data from said second memory based on said synchronization signal, and
- forming displaying data by mixing said third digital RGB signals read from said first memory and said digital information data read from said second memory,

so that said digital information data are displayed at outsides of a displaying region of said third digital RGB signals (Applicant's independent claim 1).

and digital information data read from the second memory, so that the digital information data are displayed at outsides of a displaying region of the digital RGB signals, as required by Applicant's independent claim 1.

Accordingly, Applicant's independent claim 1, as well as its dependent claims 2-6 (which incorporate all the novel and unobvious features of its base claim) would not have been obvious from Masukane at least for these reasons.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Stan Torgovitsky
Registration No. 43,958

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE



23373

PATENT TRADEMARK OFFICE

Date: December 22, 2003